trigger analysis because those companies affirmatively stated that they established collocation arrangements at the wire centers noted by Verizon, and used the transport facilities at issue only for purposes of carrying interexchange traffic.[14] Two companies did not respond to either the Commission's Census Data Request or to Staff's data requests. Therefore, the facilities of those carriers could not be considered in reaching Staff's conclusions regarding transport facility impairment.

Staff's analysis began with a line-by-line comparison between each route specified by Verizon in its initial testimony and routes specified by each of the CLECs in the Census Data Response. The line-by-line comparison for each route included the evaluation of capacity, as well as whether a transport provider made its facility available on a retail or wholesale basis.

Upon the receipt of Verizon's supplemental dedicated transport filing and CLECs' testimony, Staff conducted the same type of a line-by-line analysis. As supplemental responses were received from CLECs, Staff incorporated the additional information into the analysis to validate or modify prior conclusions. Staff's findings were based on the routes identified by Verizon in its supplemental testimony, CLEC responses to the Commission's Census Data Request and CLEC testimonies and CLEC responses to the Staff's data requests.

Responses to the Commission's Census Data Request suggested that competitive carriers use their transport facilities to backhaul local traffic to their switches or collocation points rather than for carrying traffic over dedicated transport facilities that directly connect ILEC end offices. The census data indicated, in fact, that competitive carriers typically do not use their facilities for dedicated transport. Staff concluded that CLECs generally used their transport facilities to carry

[14] In order to protect the confidentiality of the proprietary data Staff used to reach this conclusion, the specific company names are not identified here.

local traffic to their own switches, or interim collocation points, which is not indicative of dedicated transport, but is indicative of switched transport. CLECs operate mainly in an enterprise mode[15], and the facilities CLECs utilize are not pure transport. In addition, CLECs' network architecture is a combination of fiber rings and DS3 facilities that connect their Verizon collocation facilities (used as aggregation sites) to their own CLEC networks.

Based on this analysis, Staff concluded that there is insufficient evidence to overcome the FCC's presumption of dedicated transport impairment.[16] Staff concluded that CLECs would be impaired with respect to DS3 and dark fiber dedicated transport if such facilities were no longer made available as UNEs. Those conclusions hold true for each of the three markets in Maryland.

Although during a wholesale trigger analysis Staff identified an identical match between two pairs of CLEC routes and Verizon's asserted routes in the Washington DC MSA, Staff could not reach a definitive conclusion regarding non-impairment for these routes for two reasons.[17] First, Staff found unpersuasive Verizon's presumption that a dedicated transport route exists because fiber facilities are present in multiple collocation arrangements. Second, Staff did not have data support from the companies that were identified along those routes. Therefore, lacking corroborating data, Staff asserts that CLECs would be impaired for these two routes in the absence of wholesale provisioning of DS1, DS3, and dark fiber dedicated transport.

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15 "Enterprise mode" in this context means that a CLEC is utilizing a facility that could alternatively be used for dedicated transport to carry only backhaul and/or interexchange traffic.

16 The FCC's impairment standard for dedicated transport is found at TRO paragraph 366 which states that ".... we find that transmission links that simply connect a competing carrier's network to the incumbent LEC's network are not inherently a part of the incumbent LEC's local network. Rather, they are transmission facilities that exist *outside* the incumbent LEC's local network. Accordingly, such transmission facilities are not appropriately included in the definition of dedicated transport..."

17 Staff did not include a final recommendation for these two routes because it was unable to corroborate the assertion that they should be classified as non-impaired. Staff also did not name the carrier because the filed data was submitted under seal.

vi. Demarcation Between the Enterprise Market and Mass Market

Douglas Dawson of CCG Consulting assisted Staff in evaluating the demarcation point between the enterprise market and the mass market. Staff's testimony addressing this issue used direct cost data to compare the cost of a UNE-P mass market architecture to the cost of a DS-1 enterprise architecture. In addition, Staff performed its analysis separately in each of the four rate zones in Maryland. The direct cost data included the recurring and non-recurring costs associated with UNE arrangements. Staff used an average of 1,700 minutes of use to calculate the switching and transport usage sensitive costs. The service order, installation and other indirect non-recurring charges were amortized over an 18-month period in order to express them as a monthly cost. All of the costs were assembled for each rate zone in Maryland so that cost tables for both UNE-P and DS-1 could then be compared to determine the cross over point for each rate zone.

Staff's analysis established an economic break point between six and seven lines in the high-density rate zones and between five and six lines in the low-density zones. Since the markets under examination in this proceeding are the high-density zones, Staff recommended that the Commission set the break point between six and seven lines. On the basis of this economic analysis, Staff recommended that the Commission permit CLEC's to purchase UNE-P for mass market customers with as many as seven DS0 lines. It was Staff's conclusion that customers with more than seven DS0 lines should be considered enterprise market customers.

vii. Conclusion

It is clear that at the time Staff performed its analysis, there was more competition than there had been a year earlier. The increase in CLEC market penetration from about 6% to about 14% in a one-year period is significant overall. The data indicate that the increase was

attributable in large part to UNE-P based services which had recently been approved and priced in Maryland, and that only a small increase in access lines over owned facilities was in evidence. Furthermore, it was clear that the vast majority of the mass market that received service from a non-incumbent provider was being served by UNE-P. Discontinuation of mass market switching, and consequently of mass market UNE-P arrangements, would eliminate about 40 percent of all competitive lines in Maryland and almost 90 percent of the competitively-provisioned mass market lines. These conclusions are consistent with the Form 477 data Verizon filed with the FCC for its 12-31-03 time frame.[18]

Based on its analyses, the Maryland Staff asserts that mass market switching UNEs must be continued if the goal of widespread and sustained wireline competition is to be realized in Maryland. Moreover, Staff's analysis indicated that impairment exists for mass market and enterprise market loops, dedicated transport and dark fiber. These conclusions regarding impairment pertain to each of the three markets derived by Staff in Maryland. Lastly, Staff determined that the demarcation between the mass market and the enterprise market for purposes of switching impairment is in the range of six to seven DS0 lines.

D. Batch Hot-Cut Process

Directives from the FCC required state commissions to 1) approve a hot cut process,[19] 2) select the volume of hot cuts that comprise a "batch", and 3) address the costs and timeliness of the hot cut process where costs are to reflect TELRIC rates.[20] Due to the critical need for a viable hot cut process to migrate customers from UNE-P to UNE-L in those geographic markets

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[18] Selected Form 477 Data as of December 31, 2003 dated June 22, 2004.

[19] TRO Paragraph 488 which states "...must approve, within nine months of the effective date of this Order, a batch hot cut process..."

[20] TRO paragraph 489 states that "...states should decide the appropriate volume of loops that should be included in the "batch.". and further states "....state commissions should adopt TELRIC rates for the batch hot cut activities they approve."

where a finding of no impairment is determined for mass market switching serving mass market customers and the failure of the parties in Maryland to arrive at a consensus regarding a batch hot cut procedure, Staff offered its own proposal.

Carlos Candelario, an economist and Assistant Director in the Telecommunications Division of the Maryland Public Service Commission filed testimony on the batch hot-cut process. Using savings based on batch hot cut efficiencies estimated by Verizon-Maryland's costing methodology and applying these estimates to the existing interim basic hot cut rates in Maryland, Staff calculated that the rates for initial and for any additional hot cuts in the batch hot cut process should be $27.05 and $15.07 respectively. [21]

In order to arrive at the number of hot cuts to be contained in a batch, Staff began with the total number of existing UNE-P arrangements in the two MSA-based markets defined by Staff in its mass market switching impairment study. Since customers migrating from a CLEC's UNE-P service have a number of alternatives available to them other than UNE-L service, the number of UNE-P arrangements in the two MSA-based markets was multiplied by a probability of a migration resulting in a hot cut based on an estimate provided by Verizon's witness, Dr. William E. Taylor of NERA.[22] The resulting likelihood estimate was then divided by the total number of Verizon Central Offices in the two MSA-based markets in order to obtain the average number of hot cuts a central office would have to perform over the transition period.

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[21] Verizon proposed separate non-recurring rates for service order, central office wiring and provisioning for 2-wire and 4-wire batch hot cuts. The 2-wire initial hot cut rate proposed in a batch totaled $58.16 and an additional hot cuts totaled $35.16. An additional charge for field installation would be added when necessary to complete the service order or when requested by the CLEC. In addition, lines served by IDLC would be subject to an additional surcharge of $106.99. Direct Panel Testimony (Hot Cut Process and Scalability) at Exh. III-E.

[22] Direct proprietary testimony of Dr. William E. Taylor, Table 5 (proprietary) page 21. Dr. Taylor frequently testifies on behalf of Verizon. His estimate of the likelihood of migrating from the ILEC's switch to the CLEC's switch is based on the fact that customers have a number of alternatives available to them other than UNE-L service.

Staff calculated the number of hot cuts which should be contained in a batch to be 34 and this conclusion would have been filed the day after the Commission stayed Case 8988. That conclusion was based on the transition period for the elimination of mass market switching defined by the FCC[23] and allowed for growth in lines. It also is based on the assumption that hot cuts were made at a uniform migration rate during the transition period, and that the batch should be completely cut over in fourteen days.

The above methodology does not take into consideration the fact that different sized wire centers have varying amounts of resources available to perform hot cuts. In order to compensate for this factor, Staff also suggested an alternative to the one-size-fits-all approach by varying the batch size depending on the size of the wire center. Wire centers were assigned to four different groups defined by their total lines and a corresponding batch size was calculated. For wire centers having 1 to 20,000 lines, the corresponding batch size was fourteen. For wire centers having 20,001 to 40,000 total lines, the batch size was 38. For wire centers having over 40,000 total lines, the corresponding batch size was 45.

Finally for two wire centers that were considered outliers due to a very large number of UNE-P lines, the batch size was calculated as 161. Although a relatively large number, these two offices in particular must be prepared to cope with significantly larger orders of hot cuts if they are to migrate existing UNE-P customers in the time allotted by the FCC.

Staff concluded that impairment exists for mass market customers in the absence of a viable and proven hot-cut process.[24] The very fact that the parties can not seem to agree on the

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[23] The FCC TRO paragraph 532 specified the transition period over which access lines would be migrated from an ILEC switch to a CLEC switch as 20 months after a finding of no impairment.

[24] TRO paragraph 439 states "...competitive LEC residential line count does not accurately depict the ability of an entering competitive LEC to overcome the barriers to entry generated by the hot cut process.

velocity and volume requirements of a hot-cut process is evidence that impairment should be assumed in the absence of a proven hot-cut process. Staff asserts impairment should be assumed until such time as the efficacy of a working batch hot-cut process is demonstrated in the market.

Staff also suggested revisions to the Maryland Carrier-To-Carrier Guidelines and the Performance Assurance Plan to cover a newly defined batch hot cut process in order to ensure that CLECs are treated in a non-discriminatory manner in relation to Verizon-Maryland's retail customers in terms of hot-cut speed, accuracy and cost.

IV. POST TRO CHANGES AND TRENDS

A. Order of the United States Court of Appeals for the District of Columbia

On March 2, the United States Court of Appeals for the District of Columbia issued an order which vacated the FCC's sub-delegation of decision-making authority of impairment determinations for mass market switching and certain dedicated transport elements to the state commissions. The Court also upheld the FCC's TRO determination to eliminate line sharing as a mandatory UNE.

B. Maryland PSC Stay of Case 8983

On March 15, 2004 the Maryland Commission stayed Case 8983, the purpose of which was to define the Maryland markets and perform the impairment analysis defined by the FCC. As of this writing, the case has not been re-opened.

C. Maryland PSC Stay of Case 8988

On March 16, 2004 the Maryland Commission stayed Case 8988, the purpose of which was to approve a batch hot-cut process and the volume and frequency that would be required to move Maryland customers from UNE-P to UNE-L arrangements. As of this writing, the case has not been re-opened.

D. AT&T petition for a PSC Stand Still Order

On May 24, 2004, AT&T Communications of Maryland and TCG Maryland petitioned the Maryland Public Service Commission for an order preserving local exchange stability. AT&T asked the Commission to "order Verizon not to change any of the terms under which UNEs are currently being provided absent an express determination by the Commission that such change is consistent with the law and public policy applicable in Maryland."[25]

E. Maryland PSC Stand Still Order

In response to the AT&T Petition cited above, the Maryland Commission issued a letter Order on August 20, 2004 to maintain the availability of mass market unbundled switching to CLEC customers being served with four or more DS0 lines.[26] In issuing this letter Order, the Commission found that Verizon-Maryland had not yet implemented the four-line carve our rule and the Commission had not concluded Case No. 8983 to determine the appropriate demarcation between the mass market and the enterprise market as directed by the FCC.[27]

F. FCC Interim Rules Order

The FCC issued its interim rules on August 20, 2004 and established on an interim basis that incumbent local exchange carriers are required to "continue providing unbundled access to switching, enterprise loops and dedicated transport under the same rates, terms and conditions that applied under their interconnection agreements as of June 15, 2004."[28] The FCC also requested that the state Commissions provide it with a summary of the states' TRO and batch

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25 *Petition of AT&T Communications Maryland, Inc., and TCG Maryland for an Order Preserving Local Exchange Market Stability*, May 24, 2004.

26 Letter from Donald P. Eveleth, Assistant Executive Secretary to Mark A Keffer, Law & Government Affairs Vice President, Atlantic Region, AT&T Communications of Maryland and David A. Hill, Vice President and General Counsel, Verizon Maryland (August 20, 2004).

27 FCC Interim rules paragraph 497 states "...as part of the economic and operational analysis discussed below, a state must determine the appropriate cut-off for multi-line DS0 customers as part of its more granular review.".

28 FCC 04-179, page 1, released August 20, 2004.

hot-cut records. While the FCC appeared to be in discussion regarding the reinstatement of Line Sharing during the weeks preceding the release of the interim order, no mention of line sharing was included in the interim order.

G. Covad's Emergency Petition to Maintain Line Sharing

On September 9, 2004, DIECA Communications Company d/b/a Covad Communications filed a Complaint and an Emergency Petition and Complaint to maintain the availability of line sharing beyond the October 3, 2004 date previously set in the FCC's TRO as the sunset date for line sharing.[29] On September 20, 2004, Covad and Verizon-Maryland filed a joint motion to withdraw the Emergency Petition, but not the complaint, and stated that the parties had agreed to negotiate a region-wide agreement setting forth the terms and conditions under which line sharing would continue to be available.

H. USTA, Qwest and Verizon Petition for a Writ of Mandamus

On August 23, 2004, USTA, Qwest and Verizon petitioned the United States Court of Appeals for the District of Columbia to issue a writ of mandamus to enforce its mandate and retain jurisdiction to ensure future compliance. The FCC filed its response on September 17, 2004. The Court has not yet determined the disposition of the Writ of Mandamus.

I. Staff Position on Line Sharing, Line Splitting and Loop Splitting

Case 8927 has been docketed to determine if it is appropriate for Verizon to tie the availability of DSL to the purchase of its own voice telephone service. Verizon's policy in Maryland has been and continues to be that a customer that selects an alternate carrier for their voice service also surrenders its ability to purchase Verizon's DSL service. Also, Verizon has

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[29] *See, Emergency Complaint for Declaratory Order and Emergency Motion to Enjoin Verizon for Undertaking Unilateral Action to Impair Broadband Service*, ML#94352.

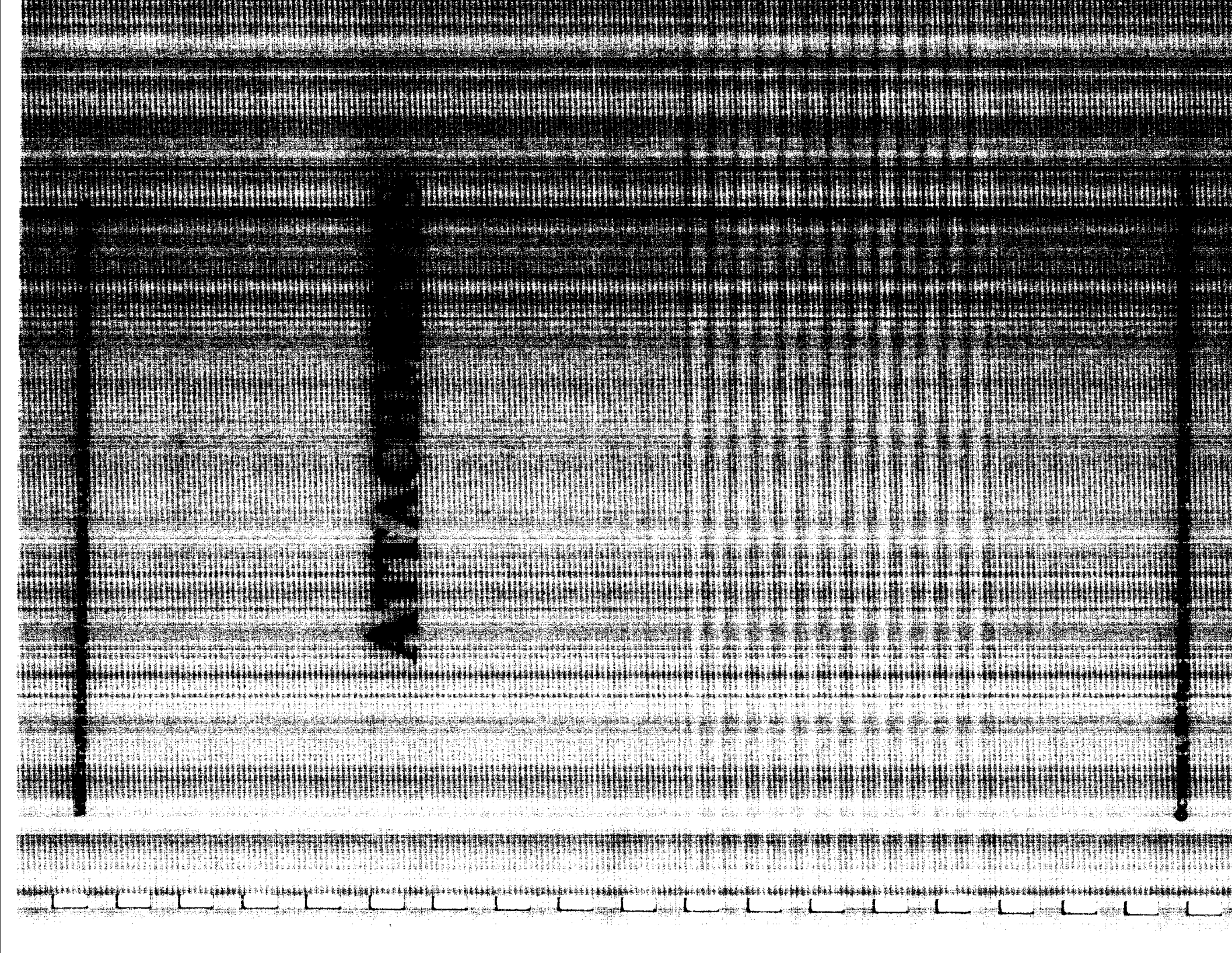
not allowed a CLEC voice customer to purchase Verizon DSL using the same loop as is used for the CLEC dial tone line.

Verizon has designated the sale of DSL service to a CLEC dial tone line as Loop Sharing to distinguish it from line sharing, and in spite of expressing a willingness to enter into discussions with interested CLECs, has not yet done so. The State of Maryland is actively seeking ways to expand the penetration of broadband services in the state. Staff asserts that, in as much as line sharing has the potential to accelerate broadband deployment in Maryland, it should be retained as a UNE. Not only should line sharing be retained, but loop sharing should also be established as a UNE so that a customer can pick and choose the dial tone provider and DSL provider of their choice.

J. Staff Position on Commercial Agreements

Maryland now has several cases docketed to arbitrate interconnection agreements.[30] In spite of Verizon's attempts and offers to negotiate interconnection agreements with CLECs under non-disclosure agreements, Staff asserts it is necessary and appropriate for all such interconnection agreements to be approved by and filed with the State Commission. If not approved for filing with the State Commission, the State Commission would not be in a position to assist the parties in reaching acceptable resolutions to disputed matters. More importantly, to ensure that pricing, terms and conditions embedded in contractual arrangements between Verizon and its carrier-customers remains non-discriminatory, such arrangements must be filed with and approved by the Commission.

30 Case No. 9013 - *Petition for Arbitration of Interconnection Rates, Terms and Conditions with Core Communications, Inc.*



BEFORE THE
PUBLIC SERVICE COMMISSION
OF MARYLAND

IN THE MATTER OF THE	*	
IMPLEMENTATION OF THE	*	
FEDERAL COMMUNICATIONS	*	
COMMISSION'S TRIENIAL REVIEW	*	
ORDER	*	**CASE NO. 8983**

PUBLIC TESTIMONY

OF

Jerry Hughes

ON BEHALF OF THE STAFF
OF THE
PUBLIC SERVICE COMMISSION OF MARYLAND

MARCH 12, 2004

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ATTACHMENTS

INTRODUCTION AND PURPOSE OF TESTIMONY

Q1. WHAT IS YOUR NAME, TITLE AND BUSINESS ADDRESS?

A1. My name is Jerry Hughes. I am the acting Director of the Telecommunications Division of the Maryland Public Service Commission. My business address is 6 St. Paul Street, Baltimore, MD, 21202

Q2. WHAT ARE YOUR QUALIFICATIONS AND EXPERIENCE?

A2. My qualifications and experience are included as Attachment A.

Q3. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A3. The purpose of my testimony is to describe the way Staff approached its evaluation of the Triennial Review Order ("TRO"). The testimony addresses the following:

- An introduction of the Staff witnesses and a summary of their conclusions;
- A description of the processes Staff created to collect, evaluate and interpret the data;
- A description of how Staff reached its initial, interim and final conclusions:

- A description of how Staff adjusted its conclusions based on the testimony of the parties and supplementary data responses;
- Staff's conclusion regarding the state of competition in Maryland;
- A description of the process Staff used to define the markets in Maryland;
- A synopsis of Staff's conclusions regarding its impairment analysis of mass market circuit switching, dedicated transport and enterprise loops; and
- Staff's proposal regarding the Commission's ongoing obligation under the TRO.

Q4. PLEASE DESCRIBE STAFF'S TRO CASE AND INTRODUCE STAFF'S WITNESSES.

A4. Staff determined that facilities based competition in Maryland exists primarily in the enterprise market and that mass market competition is predominately served by Competitive Local Exchange Carriers ("CLECs") through resale and UNE-P.

The markets in Maryland consist of the Washington and Baltimore metropolitan areas, in which Verizon Maryland Inc. ("VMD") rebutted the

FCC presumption of impairment[1] for mass market circuit switching. VMD did not rebut the FCC presumption of impairment in the remainder of the state, therefore the Commission is not obligated to determine the status of impairment in those areas. Staff witness, Kevin Mosier, concluded that the self provisioning trigger was not satisfied for mass market switching in either of the Washington or Baltimore markets, and therefore there are no geographic markets which should be designated as non-impaired with respect to mass market switching.

I participated in the market definition process which led Staff to conclude that the TRO markets in Maryland should be defined as the aggregation of specific wire centers in the Washington and Baltimore metropolitan areas. In the absence of a rebuttal of the FCC presumption of impairment, the remainder of the state was not subjected to the mass market switching impairment test.

Staff witness Faina Kashtelyan performed the dedicated transport analysis. In her testimony, Faina will describe the process Staff used to evaluate the dedicated transport routes VMD identified and explain how Staff reached its conclusions. Staff witness Kashtelyan concluded there was no evidence that the self provisioning trigger was satisfied for DS-3 or

[1] Imairment as defined by the FCC In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, CC Docket 01-338, Report and Order and Order on Remand and Further Notice of Proposed Rulemaking (rel. August 21, 2003) ("TRO"). Paragraph 84 states "We find a requesting carrier to be impaired when lack of access to an incumbent LEC network poses a barrier or barriers to entry, including operational and economic barriers, that are likely to make entry into a market uneconomic."

dark fiber facilities, and no wholesale trigger was satisfied for `DS-1[2] and DS-3 or dark fiber.

Staff has not completed its analysis of the enterprise loops case, and has not yet reached any conclusions regarding the outcome of the enterprise loops analysis. Kevin Mosier will discuss his analysis and conclusions regarding enterprise loops in testimony that will be filed on the date specified in the procedural schedule.

CCG Consulting has been engaged to provide consulting services to Staff in the TRO case and to perform a thorough analysis of the economic factors that would distinguish a mass market customer from an enterprise customer. CCG witness Douglas Dawson concluded that Maryland customers with 6 lines and below belong to the mass market, and that Maryland customers with 7 lines and above belong to the enterprise market. However, since some CLECs also sell data with voice, the use of T1 provisioning to any customer makes that customer an enterprise customer.

FCC CHARGE TO STATES

Q5. WHAT CHARGE DID THE FCC GIVE TO THE STATES IN THE TRO?

[2] DS-1 is a Digital Signal Level 1 circuit that is the basic transport element. A DS-1 circuit consists of 24 DS-0 circuits each of which is the digital equivalent of an analog 2 Wire loop circuit. A DS-3 is a larger digital transport circuit which consists of 28 DS-1 circuits.

A5. In the TRO, the Federal Communications Commission ("FCC") reached conclusions regarding the presence or absence of impairment for segments of ILEC networks. The FCC required the states to undertake impairment analyses as follows:

1. **Market Definition** – The FCC charged the states with the responsibility to define the geographic markets of each state, and to use those markets in the evaluation of other aspects of the TRO.
2. **Unbundled loops** – The FCC determined that in the absence of access to the unbundled loops of ILEC networks, CLECs would be impaired. The FCC concluded that since copper is the predominant loop type serving the mass market, "...incumbent LECs *must* (emphasis added) provide unbundled access to local loops comprised of copper wire."[3] The FCC did not charge to evaluate impairment of local loops.
3. **Enterprise market switching** – The FCC determined that CLECs were not impaired without access to enterprise switching and states could submit a request for a waiver if that finding were inappropriate.
4. **Mass market circuit switching** – The FCC determined at a national level that CLECs would be impaired without access to

[3] TRO paragraph 249.

mass market circuit switching, and charged the states to undertake a granular review where that presumption was rebutted.

5. **Dedicated Transport** - The FCC determined that CLECs were not impaired without access to OC(n) fiber facilities, but that they were impaired without access to dark fiber, DS-1 and DS-3 transport facilities. The FCC charged the states with the responsibility to evaluate rebuttals of its presumption of impairment on a route by route basis to determine if impairment had been eliminated.

6. **Enterprise Loops** – The FCC determined that CLECs were not impaired without access to OC(n) enterprise loops, but that at a national level they were impaired without access to dark fiber, DS-3 and DS-1 loop facilities. The FCC charged the states with the responsibility to evaluate rebuttals of its presumption of impairment on an address specific basis to determine if impairment had been eliminated.

STAFF APPROACH TO THE TRO

Q6. HOW DID STAFF DETERMINE AND COLLECT THE DATA THAT WOULD BE REQUIRED TO PERFORM ITS TRO DUTIES?

A6. The TRO effort in total is quite large. Staff determined early on that it needed to focus on the basic elements and issues outlined in the TRO. During this review cycle, Staff focused on presenting an accurate image of the state of competition and determining the presence or absence of impairment for mass market circuit switching, dedicated transport and enterprise loops.

At the suggestion of the parties, the Commission agreed to use a modified version of a survey template proposed by other jurisdictions. The Commission issued this interrogatory as its Census Data Request for the CLECs to provide data related to both business and residential lines served in each Verizon Maryland Inc. (VMD) wire Center where the CLEC has established collocation facilities. In addition Staff issued its own data request to determine by wire center how many resale, UNE-P and UNE-L lines were in service throughout Maryland. Staff also issued a series of follow up data requests intended to give the CLECs and VMD the opportunity to clarify earlier responses that Staff did not fully understand.

Q7. HOW DID STAFF STORE AND REASSEMBLE THE RAW DATA INTO MEANINGFULL PERSPECTIVES?

A7. Following the collection and assembly of the data, Staff created a master data repository, which it used as the source of all of the subsequent

evaluations performed. Maintaining the raw data in this fashion ensured that each phase of Staff's evaluation relied on the most objective data possible. Staff's conclusions for each of its evaluations can be traced back to the data collected.

Q8. DID STAFF USE THE CLEC DATA RESPONSES TO REACH ITS INITIAL CONCLUSIONS?

A8. Staff had completed its initial analysis before receipt of the CLEC testimony and then incorporated the additional insights identified by the CLECs' testimony and supplementary data responses.

Q9. HOW DID STAFF MANAGE DATA FROM TESTIMONY AND DATA RESPONSES?

A9. Staff used an iterative approach in all of its analyses. As additional data, testimony and supplementary data responses were filed by the parties and incorporated into the overall process, Staff performed an analysis to determine if the new data would change or validate its prior conclusions. This iterative process enabled Staff to perform its analysis objectively and reach its conclusions in a disciplined and methodical manner. Staff reached its initial conclusions early in its analysis and then incorporated the additional insights filed in subsequent testimony and supplementary

data responses.

Q10. WHAT INITIAL CONCLUSIONS DID STAFF REACH AND HOW DID STAFF ADJUST ITS CONCLUSIONS BASED ON SUBSEQUENT FILINGS AND TESTIMONY?

A10. Staff's initially concluded that impairment might still exist in mass market switching as well as in dedicated transport. As additional information and data were received and incorporated into the process, Staff was able to either adjust or validate its conclusions. The data was also used to feed a number of sub-processes as follows:

-Evaluation of competition in Maryland;

-Market definition process;

-Mass market switching impairment analysis;

-Dedicated transport impairment analysis; and

-Enterprise loop impairment analysis.

COMPETITIVE ANALYSIS

Q11. HOW DID STAFF PERFORM ITS COMPETITIVE ANALYSIS?

A11. Staff used the CLEC data sorted in various ways to identify where the CLECs are operating, how many lines they are serving and what the

relative distribution of their services are to the mass market versus the enterprise market.

Q12. WHAT TOOLS DID STAFF USE TO MANAGE THE LARGE VOLUME OF DATA PROVIDED BY THE RESPONDENTS?

A12. In addition to the consolidated web based data responses to the Commission's census data request, Staff used EXCEL spreadsheets to organize, de-aggregate and re-aggregate the data for purposes of analysis and display. Staff also utilized the services of CCG Consulting to display some of the data in graphic format to better show where CLEC services are being delivered. Attachment 1 includes a series of maps that highlight the wire centers where each of the CLECs is providing facilities based (collocation) services as well as a second series of maps that show where the UNE-P and Resale CLECs are operating.

Q13. WHAT DID STAFF CONCLUDE ABOUT COMPETITION IN MARYLAND?

A13. Staff has prepared a summary chart (Attachment JTH-B) that shows which CLECs are serving customers using their own facilities, and which CLECs are serving their customers using UNE-P and resale lines. The data shows that fewer than 5% of the CLEC facilities based lines (including the

Cable providers) serve mass market customers,[4] and that those customers represent fewer than 0.7% of the total customer lines in Maryland.

Q14. HOW MANY RESALE AND UNE-P LINES DID ALL OF THE ABOVE COMPANIES REPORT?

A14. The CLECs reported 32,170 resale lines and 220,022 UNE-P lines.

Q15. WHAT IS THE DISTRIBUTION OF THE RESALE AND UNE-P LINES ACROSS THE RELEVANT GEOGRAPHIC MARKETS?

A15. The Sum of the UNE-P and Resale lines is 252,192 for the entire State. There are 167,276 (73%) UNE-P and Resale lines that serve customers within the geographic markets defined by Staff and 60,620 (27%) lines serving CLEC customers that live outside the defined geographic markets.

Q16. PLEASE SUMMARIZE HOW STAFF VIEWS THE STATE OF COMPETITION IN MARYLAND.

A16. Staff interprets the data as an indicator that competition exists, but that it has not reached critical mass for the following reasons.

[4] 98.5% of the mass market facilities based lines reported in this proceeding are made up of Cable providers and Allegiance Telecom lines. The Cable providers do not require VMD 2W loops to reach their

-Less than 1% of mass market customers are served by facilities based competitive providers, the majority of which are cable providers;

-Greater than 90% of the facilities based lines serve the enterprise market;

-The vast majority of mass market CLEC customers (>85%) are served by UNE-P or resale.

MARKET DEFINITION

Q17. HOW DOES THE FCC DEFINE THE DIFFERENCE BETEWEEN A MASS MARKET CUSTOMER AND AN ENTERPRISE CUSTOMER?

A17. The FCC stated that the customers for mass market services are different than the customers for enterprise services.[5] The FCC further qualified its view of the differences in footnote 1402 of the TRO as follows:

> "Mass market customers are residential and very small business customers – customers that do not, unlike larger businesses, require high-bandwidth connectivity at DS1 capacity and above. Z-Tel Comments at 30-31. Mass market customers' accounts tend to be smaller, lower revenue accounts and are often serviced on a month-to-month basis and not pursuant to annual contracts. The record shows that consumers of DS1 capacity and above telecommunications are more willing to sign annual or term commitments."

customers, and Allegiance did not report that it uses any VMD loops. This suggests that Allegiance utilizes an enterprise architecture to serve its mass market customers.